ABSTRACT

A commutator motor having excellent performance of preventing coils from being burnt at overload can operate from either AC or DC power sources. This commutator comprises an iron core having plural slots, a rotation shaft inserted in a center of the iron core, and a pair of first and second commutators mounted on the rotation shaft at opposite ends of the iron core. A first coil wire is connected to the first commutator, and is wound on bottoms of the slots to form an inner coil. A second coil wire having a smaller diameter than the first coil wire is connected to the second commutator, and is wound on the inner coil in the slots to form an outer coil.